



ENHANCING CAPACITY FOR LOW EMISSION DEVELOPMENT STRATEGIES (EC-LEDS) CLEAN ENERGY PROGRAM

QUARTERLY PROGRESS REPORT

APRIL 1, 2016 - JUNE 30, 2016

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DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

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TABLE OF CONTENTS

Ac	ron	yms	iv
l.		Executive Summary	6
l.		Year three, quarter three highlights	8
,	۹.	Progress to date	8
I	3.	Component One Highlights	11
(C.	Component Three Highlights	12
II.		Activities Completed during Year Three, quarter three	13
,	۵.	Component One: Georgian Municipal Energy Efficiency (GeMunee)	13
	I.	Develop Muni-EIPMP Analytical Tool	13
	II.	Establish Sustainable Energy Offices or Regional Sustainable Energy Resource Centers	14
	III.	Develop Monitoring/Reporting/Verification (MRV) Plans	15
	IV.	Develop Sustainable Energy Public Awareness Plans	15
	٧.	Identify and Implement Demonstration Projects through Partial Grants	16
	VI.	Development Credit Authority Guarantees and Financial Institution Assistance	17
I	3.	Component Two: Green Building Rating and Certification System- completed	17
(C.	Component Three: National EC-LEDS Working Group and Advisory Assistance	17
	1. 9	Support to GOG in Developing the LEDS Document	17
	ii.	Analytical and advisory service	18
	iii.	Capacity building and technical assistance	19
	IV.	. Advisory assistance to GOG	20
	٧.	Ensure involvements in international projects, trainings, and programs	20
ı	D.	Project Administration	21
ı	Ε.	Environmental Protection Activities	21
ı	₹.	Cross-Cutting Activities	23
	i. 1	National Public Communications and Outreach	23
	II.	People with Disabilities (PWD), Youth, and Gender	26
	III.	Cooperation with other USAID programs	27
Ι.		Year three Work Plan: Deliverables Submitted in Year three Quarter Three	28
Ar	nex	I: Schedule of Planned Future Events	54
,	۵.	Component One	54
ı	3.	Component Two	54
(C.	Component Three	54
I	D.	Public Outreach	54
ı	Ε.	Environmental Compliance	55

Anne	x II: Quarter Four Planned Deliverables and Products	56
A.	Component One	56
В.	Component Two	56
C.	Component Three	56
D.	Communications and Outreach	56
E.	Monitoring and Evaluation	56
F.	Environmental Compliance	56
Anne	x III: Report on EC-LEDS youth Energy Efficiency Event	i
execu	ıtive summary	58
	n ee event	
Part	ticipants	59
Cor	ntent	59
PRE	SENTER	59
VEN	NUE, Timing and Logistics	60
concl	usion	61
attac	hment a: lists of participantsError! Book	mark not defined.
attac	hment B: contest questionnaire	64
attac	hment C: Awards	69
attac	hment D: photosError! Book	mark not defined.
Anne	x IV: Media coverage report	72

ACRONYMS

AD Analytic Department

AOR Agreement Officer's Representative

ASHRAE American Society of Heating, Refrigerating and Air-Conditioning Engineers

BAU Business as Usual BP British Petroleum

BREEAM Building Research Establishment Environmental Assessment Method

CBSM Community Based Social Marketing

CC Climate Change

CFL Compact Fluorescent Lightbulb

CoM Covenant of Mayors
COP Chief of Party

DCA Development Credit Authority

DCOP Deputy Chief of Party DWG Decision Ware Group

EB Energy Balance

EBRD European Bank for Reconstruction and Development

EC-LEDS Enhancing Capacity for Low Emission Development Strategies
ESP Eastern European Energy Efficiency and Environment Partnership

EE Energy Efficiency

EPBD Energy Performance of Buildings Directive

EU European Union
EWG Expert Working Group
FFC Fast Forward Communications
G4G Governance for Growth

GALA Georgian Association of Landscape Architects

GB Green building

GBCG Green Building Council Georgia
GDP Gross Domestic Product

GE Georgia

GEC Grants Evaluation Committee
GeMunee Georgian Municipal Energy Efficiency

GHG Greenhouse gases

GIZ Intended Nationally Determined Contribution

GOG Government of Georgia
GTU Georgian Technical University
ICC International Code Council

IECC International Energy Conservation Code
INDC Intended Nationally Determined Contribution

JRC Joint Research Center
LED Low emission development

LEED Leadership for Energy and Environment Design LEDS Low Emission Development Strategy (ies)

MOE Ministry of Energy

MoENRP Ministry of Environment and Natural Resources Protection

MoESD Ministry of Economy and Sustainable Development

MOU Memorandum of Understanding MRV Monitoring, Reporting and Verification

Muni-EIPMP Municipal Inventory, Projection and Mitigation Planning

NAMA Nationally Appropriate Mitigation Actions NGO(s) Non-Governmental Organization(s)

NTC New Technology Fund

PEA Programmatic Environmental Assessment

PR Public Relations

PSA Public Service Announcement

PWD People with Disabilities
RFP Request for Proposals
SC Steering Committee

SCM Steering Committee Meeting

SDAP-Center Sustainable Development and Policy Center

SEAP Sustainable Energy Action Plan SEO Sustainable Energy Office

SIDA Swedish International Development Cooperation

SWG Sub-Working Group

TEC Tender Evaluation Committee

TOT Train-the-Trainer

USA United States of America

USAID United States Agency for International Development

USG United States Government

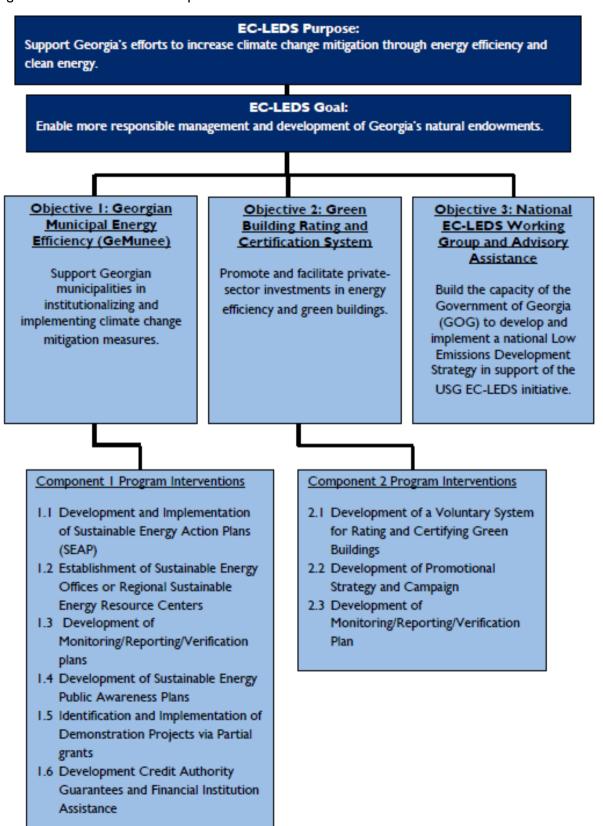
I. EXECUTIVE SUMMARY

Georgia's Enhancing Capacity for Low Emission Development Strategies (EC-LEDS) Clean Energy Program, funded by the United States Agency for International Development (USAID), is a four-year (October 2013 – September 2017) effort focusing on three activities: 1) Georgian Municipal Energy Efficiency (GeMunee); 2) Green Building Rating and Certification System; and 3) National EC-LEDS Working Group and Advisory Assistance. USAID awarded Winrock International (WI) a cooperative agreement to implement Georgia's EC-LEDS Clean Energy Program to support climate change mitigation by building municipal capacity in climate change mitigation measures and raising public awareness; increasing private sector investment in energy efficiency (EE) and green buildings (GB); and strengthening Government of Georgia (GOG) capacity to develop and implement a national Low Emission Development Strategy (LEDS). This report describes year three, quarter three activities of the EC-LEDS Clean Energy Program covering the period April 1, 2016 through lune 30, 2016.

The objectives of the EC-LEDS program are to (1) support Georgian municipalities in institutionalizing and implementing climate change mitigation measures, (2) promote and facilitate private sector investment in energy efficiency and green buildings, and (3) build the capacity of the GOG to develop and implement a national Low Emission Development Strategy in support of the United States Government (USG) EC-LEDS initiative. During the four years, the EC-LEDS Clean Energy Program is expected to reduce greenhouse gas (GHG) emissions in Georgia by at least 236,372.9 metric tons of CO₂ equivalent, facilitate up to \$14 million in private sector investments in clean energy, and lead to energy savings of up to 315 GWh (the equivalent of approximately \$22 million).

Figure 1, EC-LEDS Activities Map, illustrates the project purpose, goal, the objectives, and the program initiatives associated with each objective.

Figure 1. EC-LEDS Activities Map



I. YEAR THREE, QUARTER THREE HIGHLIGHTS

A. PROGRESS TO DATE

A summary of progress through the end of quarter three, year three, by selected indicators is provided below. If total cumulative actual to date is zero, the indicator is not included in the table below.

Table I. Summary of Total Cumulative Actuals vs. LOP Target by Output and Outcome Indicators

Indicator	Туре	Total Cumulative Actual (Y1+Y2+Y3/ Q3)	Total Cumulative Target (Y1+Y2+Y3)	Y3 Target	LOP Target
OC2: Quantity of greenhouse gas (GHG) emissions, measured in metric tons of CO₂equivalent (CO2e), reduced or sequestered as a result of USG assistance	Outcome	0	43,000	55,000	236,000
OC3: Energy saved due to energy efficiency/conservation projects as a result of USG assistance	Outcome	0	62,000	75,000	315,000
OC4: Value of private sector clean energy investments	Outcome	37.36	4	3.64	14
OC5: Number of local organizations positioned to receive USG funding and implement USG projects as a result of EC-LEDS assistance	Outcome	0	0	1	1
OC6: Percentage of individuals reached by the public awareness campaign who take at least one energy saving action	Outcome	0	10%	10%	10%
OC7: Expected lifetime energy savings from energy efficiency or energy conservation, as a result of USG assistance (OC7)	Outcome	19,953,141.12	19,929,600	44,583,4 06.65	

Indicator	Туре	Total Cumulative Actual (Y1+Y2+Y3/ Q3)	Total Cumulative Target (Y1+Y2+Y3)	Y3 Target	LOP Target
OC8: Projected greenhouse gas emissions reduced or avoided through 2030 from adopted laws, policies, regulations, or technologies related to clean energy as supported by USG assistance	Outcome	1726,765.7	1,699,549.7	3,237,40 2	
OP1: Number of low emission development plans developed and/or implemented as a result of USG assistance (LEDS, SEAP, other)	Output	9	10	3	10
OP2: Number of Sustainable Energy Offices (SEOs) or regional Sustainable Energy Resource Centers established in participating municipalities	Output	1	3	2	5
OP4: Number of stakeholders using climate information in their decision-making as a result of USG assistance.	Output	20	14	2	16
OP5: Number of laws, policies, strategies, plans, agreements or regulations addressing climate change mitigation officially adopted or implemented/proposed with USG assistance	Output	1	2	1	3
OP6: Number of climate change mitigation tools, technologies or methodologies developed, tested and/or adopted as a result of USG assistance OP7: Number of	Output	2	2 500	1,000	2 1,500 hh

Indicator	Туре	Total Cumulative Actual (Y1+Y2+Y3/ Q3)	Total Cumulative Target (Y1+Y2+Y3)	Y3 Target	LOP Target
households/businesses/ public institutions		0	2	8	10 Businesses
implementing energy efficiency measures as a result of USG assistance (# HHs, # businesses, # institutions)		0	2	8	10 Institutions
OP8: Number of climate change mitigation projects implemented as result of USG assistance	Output	8	5	15	20
OP10: Number of individuals reached through outreach campaigns	Output	521,552	500,000	250,000	1,000,000
OP 11: Number of USG- supported training or activities that contribute to building the EE knowledge and skills in the GOG, Municipalities, industry and other stakeholders	Output	49	36	14	50
OP13: Value of grants disbursed as a result of USG assistance for scientific research and energy efficiency pilot projects	Output	\$ 309,459.68	\$ 500,000.00	\$ 190,540. 32	\$ 500,000.00
OP14: Number of promotional plans and campaigns implemented to increase awareness of citizens about energy efficiency	Output	2	2	2	2
OP15: Number of beneficiaries receiving improved infrastructure services due to USG assistance	Output	0	1	2	3
OP17: Number of MRV plans developed to track the impact of SEAP implementation	Output	8	7	3	10

Indicator	Туре	Total Cumulative Actual (Y1+Y2+Y3/ Q3)	Total Cumulative Target (Y1+Y2+Y3)	Y3 Target	LOP Target
OP18: Number of individuals at national and local level trained in climate change as a result of USG assistance	Output	445	50	20	70
OP22: Number of decisions made by LEDS steering committee or involved agencies using analysis based on MARKAL or other appropriate tools	Output	2	0	2	2

B. COMPONENT ONE HIGHLIGHTS

- The Georgian version of the Sustainable Energy and Climate Action Plan (SECAP) for the Municipality of Telavi Community (Temi Telavi Municipality) was finalized by local experts and municipality representatives, with technical support from Remissia. The document was submitted to the management of the Municipality and is being reviewed by the representatives of different departments of the Municipality to be presented to the Council of the Temi Telavi Municipality for approval;
- The English version of the technical project proposals for Bolnisi and Temi Telavi
 Municipalities (Utilization of Solar Energy for through Centralized Solar Farm in Bolnisi
 and Hybrid Utilization of Biomass and Solar Energy for Heating of Kindergarten Building
 in Pshaveli Village) were prepared with technical support from the project;
- Bolnisi Municipality Sustainable Energy Action Plans (SEAP) document was translated into English and uploaded on the Covenant of Mayors (CoM) web page for review and approval by the Joint Research Center (JRC);
- Working meetings were conducted with the Mayor and other representatives of
 Mtskheta City hall to discuss the details of the SEAP preparation process. The latter has
 been started with the leadership of the Mayor and facilitation of SEAP coordinator and
 local expert. The project provides technical support in order to make sure that the
 energy audit is conducted properly, baseline emissions and BAU emissions are calculated
 and mitigation measures are identified.
- EC-LEDS drafted amendments to the Economic Development Departments' charters for the municipalities of Kutaisi, Zugdidi, and Batumi. Said amendments will ensure that Sustainable Energy Offices (SEO) functions are incorporated into the Economic Development Departments of the municipalities.

- EC-LEDS provided assistance to Akhaltsikhe in setting up a Sustainable Development Agency, which incorporates SEO functions.
- EC-LEDS worked directly with the municipalities of Bolnisi and Telavi Community (Temi) to identify grant projects. EC-LEDS identified one project for each municipality and assisted them in developing project proposals. After receiving USAID concurrence and approval on the selected projects, EC-LEDS will formalize agreements with the subrecipient and the project works will commence.
- Vendors for Batumi and Zugdidi Street lighting projects delivered the lighting fixtures to the municipalities.

C. COMPONENT THREE HIGHLIGHTS

- MARKAL-Georgia's BAU scenario underwent final review and updated the BAU report was prepared;
- Sub-working group meetings on transport, buildings, energy, and industry sectors were
 conducted to discuss the analysis of emissions and past and future trends as well as the
 mitigation options; EC-LEDS provided analyses, projections, and comprehensive
 information on sectors' development in Georgia.
- Based on the meeting and technical work conducted by the EC-LEDS team, the first versions of industry, transport, energy and building sector overviews and mitigation measures were finalized in Georgian, translated in English, and submitted to USAID;
- The development of sectoral chapters on transport, buildings, energy and industry for LEDS document was started and entered an active phase. The draft of the Transport chapter was finalized and is under internal review;
- The EC-LEDS team started the preparatory work for organizing working meetings of the sectoral working groups and steering committee to be held in the coming months.
- The Climate Change office of the Ministry of Energy and Natural Resource Protection (MoENRP) was regularly receiving updates on the development of MARKAL Georgia as well as detailed clarifications on the main findings and results from EC-LEDS; the climate change (CC) office also needed EC-LEDS assistance for preparing the information and materials for major international events in the field of climate change and the related mitigation options.
- EC-LEDS intensified its works with the sectoral Sub Working Groups (SWGs) and arranged all four energy related SWGs working meetings. The SWGs received detailed information regarding their relevant sectors and had intensive and fruitful discussions with EC-LEDS.
- As a follow-on of the conducted meetings, SWGs members provided their feedback, which were further analyzed and sorted out before including in the LEDS document.
- EC-LEDS expended its activity with the governmental bodies and alongside the ministries the main stakeholders of the LEDS process worked intensively with Tbilisi

City Hall. EC-LEDS provided consultancy services in the field of clean transportation. Municipal transport related emissions were analyzed and discussed, as it stands as a very vulnerable issue for Tbilisi and other large CoM signatory cities in Georgia.

 EC-LEDS was actively involved in the works of all major International projects, trainings and programs, including Georgia's First Biennial Update Report (FBUR) to the UNFCCC, managed by UNDP.

II. ACTIVITIES COMPLETED DURING YEAR THREE, QUARTER THREE

A. COMPONENT ONE: GEORGIAN MUNICIPAL ENERGY EFFICIENCY (GEMUNEE)

- i. Develop and Implement Sustainable Energy Action Plans (SEAPs)
- I. <u>Develop Muni-EIPMP Analytical Tool</u>

During this quarter, EC-LEDS continued testing and updating the muni-EIPMP tool under the context of developing the Temi Telavi and Mtskheta Municipality SEAPs.

The testing and updating will continue through the end preparing the Mtskheta SEAP and will be presented and submitted to the municipalities for their further application.

2. <u>Develop and Conduct Workshops and On-the-Job Training on SEAP Development and Monitoring</u>

Report on the workshop on SEAP monitoring parameters and techniques conducted on March 31 in Coste Hotel Tbilisi was prepared and submitted to USAID.

As for the working meetings, during this quarter, EC-LEDS held or participated in the following meetings:

- Two final working meetings were conducted with the SEAP coordinator and local experts of Temi Telavi Municipality to technically review and finalize the collected data and information; also to brainstorm on possible mitigation measures to be included in the plan.
- Two working meetings were held with Mtskheta City Hall. During the first working meeting, EC-LEDS team met with the Mayor of Mtskheta and the SEAP coordinator to discuss the details of possible collaboration with and technical support from the EC-LEDS project. The Mayor expressed interest and readiness to make an effort to coordinate the process as much as possible on a local level. After the meeting, the Mayor sent an official letter to EC-LEDS COP with the request to include Mtskheta in the list of the municipalities receiving

technical support from EC-LEDS project. At the second meeting, EC-LEDS team met the SEAP coordinator of Mtskheta City and potential local expert who would be helping Mtskheta Municipality in data collection and analysis on a local level. The local expert was provided with the detailed information on the methodology for developing the SEAP document, possible barriers and solutions were also identified. In-house experts of the project provided the local experts with all supporting excel sheets, tables, and draft letters that should facilitate the data collection and analysis on a local level.

3. Assist in Developing, Revising, and Updating SEAPs for municipalities with Priority Needs

The SECAP (Sustainable Energy and Climate Action Plan) for Temi Telavi Municipality was finalized and submitted to the Temi Telavi Municipality for review, comments, and final changes. In addition to traditional SEAP sectors – buildings, transport, street lighting, greening, and waste, the document addresses the energy efficiency measures in the agricultural sector as well. The communication and Monitoring, Reporting, and Verification (MRV) plans are also developed. The SECAP document was submitted for translation into English and is under the process of uploading on the CoM web-site.

In May, an active collaboration started between the SEAP coordinator and local experts from Mtskheta City Hall. The local expert provided locally available data and information on requested sectors. There were some difficulties in data collection as Mtskheta became a self-governing city only in 2014 and energy consumption data for 2012 and 2013 were challenging to identify and access. However, the issue was addressed in consultation with EC-LEDS technical experts and the team jointly started to analyze the data and provided information.

The project proposals for the Bolnisi Municipality and Temi Telavi Municipality (English versions) were finalized and submitted to the local governments. Bolnisi SEAP was translated into English and uploaded on CoM web site.

II. Establish Sustainable Energy Offices or Regional Sustainable Energy Resource Centers

During this quarter, EC-LEDS drafted amendments to the charters of Economic Development Departments of Kutaisi, Zugdidi, and Batumi municipalities, which were submitted to municipalities for review, acceptance, and submission to the city councils for approval. EC-LEDS also asked municipalities to identify areas of deficiencies in their departments, focusing on staff capacities, and also addressed EC-LEDS with an official letter describing where the municipalities would require

further technical assistance. EC-LEDS intends to circulate the letter with relevant donors to help municipalities receive the required assistance.

EC-LEDS team also assisted Akhaltsikhe municipality in drafting it's charter for a Sustainable Development Agency, ensuring that all CoM functions are included and there is enough flexibility in the charter to allow the agency to expand on its activities and areas of work in the future, further enhancing sustainability.

III. Develop Monitoring/Reporting/Verification (MRV) Plans

The EC-LEDS team developed the MRV Plan for Temi Telavi Municipality's SECAP, along with the actual SEAP document. Currently, the team is working on the MRV Plan for Mtskheta City Hall.

IV. Develop Sustainable Energy Public Awareness Plans

In this reporting period, EC-LEDS updated the National Communications Plan developed in year one. The Program will continue to take a two-pronged strategic approach to communications: I) broad information campaigns at the national and local levels to raise general energy efficiency and conservation awareness; and, 2) community-based social marketing to change targeted behavior in selected communities. This quarter in particular, EC-LEDS worked with Kutaisi City Hall.

Kutaisi City Hall addressed EC-LEDS with an official letter requesting to change the planned greening activities under Kutaisi's Community Based Social Marketing (CBSM) campaign. The City Hall arranged an energy efficient public park, which is located above the underground on Rustaveli Avenue in the central-historical district of the city. The location is crucial as it includes many places of public gathering, including: public transport stops, tourism information center, Art Gallery, Public School #1, Golden Marquee, mixed market, and various merchant entities located in the underground. The park will serve as a recreation area for the residents of Kutaisi as well as tourists.

As part of its CBSM pilot campaign in Kutaisi, EC-LEDS supported Kutaisi City Hall in installation of the Daisy-shaped "Solar Tree" equipped with solar elements and modern technologies. The Solar Tree is an imitation of a four-meter high daisy flower, which is equipped with various types of charging plugs attached to the stem. The system of the Solar Tree is made up of three main parts: solar panels, charging controller, and accumulator. Solar panels convert solar energy into the electric energy, which is supplied to the accumulator through the charging controller, where the energy is accumulated. Charging capacity of the Solar Tree is 30 cell phones simultaneously and 50-60 cell phones per 24 hours. As a signatory to the CoM, Kutaisi City Hall's strategy for reduction of GHG emissions envisages reduction of energy consumption using economically accessible energy efficient/renewable energy technologies.

The CBSM launch ceremony was held on June 30.

As part of the SEAP process, EC-LEDS is assisting municipalities in drafting their SEAP communications strategies. In the reporting period, a communications strategy was developed for Telavi SEAP.

V. Identify and Implement Demonstration Projects through Partial Grants

During the reporting period, EC-LEDS worked with the municipalities of Telavi (Temi) and Bolnisi to identify grant projects for award in the third round of the EC-LEDS partial grants program. As a result, EC-LEDS identified two projects and assisted the municipalities in developing the following project proposals: Utilization of Solar Energy through Centralized Solar Farm in Bolnisi and Hybrid Utilization of Biomass and Solar Energy for Heating of Kindergarten Building in Pshaveli Village.

Total cost of each grant is \$50,000, with contributions equaling \$432,558 of municipal funds in Bolnisi's case and \$241,860 in Telavi's case.

EC-LEDS submitted an official request to USAID to receive approval on issuing fixed amount awards (FAAs) to New Technology Center for Bolnisi and Telavi projects. EC-LEDS held a meeting with USAID representatives to go over the details of the submitted request and received suggestions from USAID on changes to the request. EC-LEDS submitted a revised request to USAID on June 27, 2016. EC-LEDS received approval from USAID on June 28, 2016. EC-LEDS has finalized the agreements and has commenced.

In parallel, EC-LEDS finalized agreements with vendors for Zugdidi and Batumi street and park lighting projects, and the vendors delivered the equipment to the municipalities in May. EC-LEDS representatives attended and monitored the delivery and warehousing process together with municipality and vendor representatives.

After receiving USAID approval for the second round of grant projects for Akhaltsikhe, Telavi City, and Rustavi, EC-LEDS finalized agreements with the sub recipients for Telavi and Rustavi projects and project works started. As for Akhaltsikhe project, EC-LEDS encountered delays as Akhaltsikhe needed to provide technical designs to EC-LEDS for the project to be able to announce tenders on procurement of lighting fixtures for Rabati Castle. Akhaltsikhe has not yet provided technical designs as the end of this quarter. EC-LEDS will consider pulling out of this grant project, if the technical designs are delayed, to ensure timely completion of the project by end of September 2016.

EC-LEDS held a meeting with Mtskheta Municipality Mayor and his technical staff, to talk about potential grant projects. As a result, EC-LEDS identified a project, where EC-LEDS may participate with its grant. The project concerns construction of a multi-functional sports complex and swimming

pool, where municipality is investing approximately 4.2 million GEL. EC-LEDS asked the municipality to provide an official letter requesting the program's assistance and project details.

Mtskheta Municipality provided an official letter requesting EC-LEDS grant assistance for the sports complex project. The municipality also provided construction projects. EC-LEDS technical team will evaluate the project and its potential to generate energy savings and GHGs reductions. Once EC-LEDS evaluates the project, the program will present the concept to USAID for concurrence and preliminary approval, and if approved, will assist the municipality in developing a full project proposal.

EC-LEDS held an opening ceremony for Tbilisi Elderly House project on June 27, 2016 and for Kutaisi Torpedo Project on June 30, 2016. USAID, BP and municipality representatives attended the openings.

VI. Development Credit Authority Guarantees and Financial Institution Assistance

European Bank for Reconstruction and Development (EBRD) approved a Euro 27 million sovereign loan to Georgia to be on-lent to Tbilisi to purchase 200 new compressed natural gas (CNG) buses. The new buses will improve services to the population by increasing reliability, safety, and efficiency of public transport while reducing emissions. The loan is supplemented by Euro 7 million grant by the Eastern Europe Energy Efficiency and Environment Partnership (E5P) fund.

B. COMPONENT TWO: GREEN BUILDING RATING AND CERTIFICATION SYSTEM- COMPLETED

In September 23, 2015, EC-LEDS and USAID agreed that the Program met all Component Two targets and thus the Component is deemed complete and there will be no continuation of activities in year three.

C. COMPONENT THREE: NATIONAL EC-LEDS WORKING GROUP AND ADVISORY ASSISTANCE

I. Support to GOG in Developing the LEDS Document

EC-LEDS team continued work on analyzing activity data, energy consumption and emissions in each considered sector to be used as a basis for the development of sectoral overviews and mitigation options.

The results of the analysis of sectors were presented and discussed at the sub-working groups (SWG) meetings for transport, buildings, energy, and industry. The project team prepared and

delivered two presentations per each working group, one presentation focusing on the analysis of emissions and past and future trends, and the second on the mitigation options in considered sectors.

Based on the outcomes of the SWG meetings, the list of changes to be made to the Business as Usual (BAU) scenario and mitigation scenarios was prepared and sent to DWG to incorporate in MARKAL-Georgia.

MARKAL-Georgia's BAU scenario underwent final review and updated the BAU report was prepared and submitted to USAID.

Based on all technical work conducted, as well as working meetings with the sectoral SWGs, the first versions of industry, transport, energy, and building sector overviews and mitigation measures have been finalized in Georgian, translated into English, and submitted to USAID. After that, the EC-LEDS team started to work on development of the sectoral chapters, which will consist of three parts: (1) description of the current situation in the sector (short versions of overviews), (2) sectoral LEDS strategy for 2030, and (3) description of mitigation measures within the sector. The first draft version of the transport sector chapter has been developed and is currently under internal review. The industry chapter is also under development. For buildings and energy sectors, the descriptions of mitigation measures are drafted.

The project team also prepared presentations for working groups and steering committee meetings to be held in July 2016. The European Union (EU) legislation and individual EU Member countries' policies were analyzed in each sectors to present to sub-working groups and propose the best low emission development strategies for Georgia.

A meeting was held with the Climate Change Office of the Ministry of Environment and Natural Resources Protection to update them on the current status of development of LEDS and plan working group and steering committee meetings in July 2016.

ii. Analytical and advisory service

In the third quarter EC-LEDS actively worked with the sectorial sub working groups (SWGs). On April 8, 2016 EC-LEDS organized a LEDS Transport Sub-Working group meeting, where stakeholders from various governmental, private and non-governmental organizations working in transport sector of Georgia as well as the USAID representatives participated. Transport Sub-Working group meeting was followed by Energy sub-working group meeting, which was held on April 13 at the Ministry of Energy. The meetings summarized the research and findings of LEDS in the sector and analyzed the proposed mitigation options.

The Industry sub-working group meeting was organized by EC-LEDS on April 18. The members of the group received comprehensive information based on LEDS research in this sector. The SWG members and the invited experts agreed on the BAU projections and discussed the related mitigation options. The head of the CC office of MoENRP was interested in the details related to the energy consumption by large energy consuming industry in Georgia, namely clinker and cement

production by "Heidelberg Cement Georgia" and the ratio of dry and wet methods of cement production. The head of the CC office of MoENRP received comprehensive information based on EC-LEDS research of the sector.

On May 10, EC-LEDS organized a LEDS Buildings Sub-Working group meeting. The meeting was attended by the SWG members, invited experts, USAID representatives and other stakeholders. Two Presentations were made: "Overview of the Building Sector of Georgia" and the "Mitigation Measures in the Building Sector of Georgia". The presentations were followed by questions and general discussion. EC-LEDS answered all the questions, made clarifications, and provided analyses, projections and comprehensive information on the Building sector development in Georgia.

Thus EC-LEDS arranged all four energies related SWGs working meetings. The SWGs members received detailed information in their relevant sectors and had intensive and fruitful discussions with the project. SWGs members provided their feedbacks, which were further analyzed and sorted out before including the results into the LEDS document.

iii. Capacity building and technical assistance

The CC office of the MoENRP regularly received updates and clarifications on the projections related to the increase of total primary energy use in BAU scenario, the EC-LEDS advisor in cooperation with the CC office head worked on updated MARKAL Georgia BAU scenario report provided by EC-LEDS. As follow-on activities, the EC-LEDS advisor worked with the head and the staff of the MoENRP CC Office and discussed the sectorial SWGs inputs and analyses on relevant sectorial emissions, as well as mitigation options to be reflected in MARKAL Georgia, which was revised and updated by EC-LEDS project.

During the reporting period, EC-LEDS extended its activity with the government bodies and alongside the ministries, the main stakeholders of the LEDS process, worked intensively with Tbilisi City Hall. EC-LEDS provided consultancy services to the municipality officials in the field of clean transportation.

The LEDS Advisor had a meeting at Tbilisi City Hall with the Head of Economic Service of Tbilisi Municipality and the Head and the staff of the Transport department. The LEDS Advisor informed the officials of the Tbilisi City Hall about the LEDS findings related to the emissions from the transport sector and focused on the emissions related to Tbilisi municipality transport. The parties discussed the possibilities of introducing alternative, renewable, eco-friendly biofuel for the municipality transport fleet as a strong mitigation option.

EC-LEDS provided additional assistance to the Ministry of Energy. The LEDS Advisor met with the Head of Renewable Energy(RE)/Energy Efficiency(EE) Department of the Ministry of Energy. He made an overview and analyses of the new amendment to the regulation by Georgian National Energy Regulation Committee (GNERC) related to mandatory connection of electricity generation sources under 100 kW to the national grid.

IV. Advisory assistance to GOG

The CC office was regularly receiving updates on the MARKAL Georgia development and detailed clarifications on main findings and analysis results from EC-LEDS; the CC office also needed EC-LEDS assistance for preparing the information and materials for major international events in the field of Climate Change and the related mitigation options.

EC-LEDS worked with the CC office staff on the analysis of energy consumption and related emissions from the building sector of Georgia; discussed the main obstacles against practical application of the measures designed for implementation of energy efficient rehabilitation to residential and commercial sectors. The EC-LEDS advisor worked together with the staff of the CC Office of the MoENRP on a regular basis to analyze the mitigation options in the transport sector of Georgia; he provided the ministry staff with the information and calculations related to alternative, renewable biofuels based on local bio resources, which can gradually replace fossil fuels in the transport sector.

The EC-LEDS advisor assisted the GoG and arranged a meeting with the team of Japanese electrical engineering company, Fuji Furukawa, which is the main contractor of the Japan – Georgia Intergovernmental agreement on introducing clean electricity by using solar photovoltaic systems. At the request of the Ministry of Economy, the LEDS advisor provided information on electricity generation, transmission, and distribution systems in Georgia and Tbilisi in particular, and analyzed the country's energy balance; the representatives of the Japanese company also received information on development and progress of LEDS project in Georgia.

V. Ensure involvements in international projects, trainings, and programs

During quarter three, EC-LEDS participated in the following seminars and workshops:

• EC-LEDS participated in the seminar dedicated to biofuel development in Georgia. The seminar was organized by Ilia State University and sponsored by the embassy of the USA in Georgia. The project advisor made a presentation on the theoretical and practical achievement related to biodiesel production and practical testing as alternative renewable eco-friendly fuel in Georgia.

- The LEDS Advisor participated in the international seminar arranged by the Faculty of Architect and Buildings of the Tbilisi Technical University and Ilia State University. The architects and developers were interested in the LEDS process and its influence on the building sector. The advisor provided detailed information about the strategies in the building sector related to low emissions development and energy efficient buildings.
- The LEDS Advisor participated in the theoretical and practical training organized under the project of the Japanese government's project "The Project for Introduction of Clean Energy by Solar Electricity Generation System in Georgia", dedicated to the development of alternative, renewable energy resources in Georgia.
- The LEDS Advisor participated in a program to evaluate and identify the most effective energy efficient equipment and energy solutions and implement them in the building Sector of Georgia; the program was sponsored by the Japan International Cooperation Agency (JICA).

D. PROJECT ADMINISTRATION

During quarter three, EC-LEDS completed the following project administration tasks:

- 1. Requested prior written approval from it's Agreement Officer (AO) on the procurement of equipment under the EC-LEDS partial grants programs on June 2, 2016, and received an approval on June 7, 2016;
- Submitted technical and cost application on EC-LEDS additional activities and ceiling increase on June 15th to Ms. Rebecca White, Regional Contracting and Agreement Officer. EC-LEDS received comments and questions from USAID on June 29, 2016 and is currently preparing responses.

Lessons Learned

The following items were lessons learned during this quarter:

- The GoG needs more advisory services, specifically while preparing for the major international events;
- Additional meetings and trainings ensure better project results.
- The sectorial SWGs will work more efficiently when they receive strict directions from the relevant ministries;
- The EC-LEDS project goes on much more successfully when the communication and cooperation with the stakeholders are even more intensive than planned earlier.

E. ENVIRONMENTAL PROTECTION ACTIVITIES

Environmental Review Checklist document for "Heidelberg Cement Georgia CM3 Research and Renovation" project in Rustavi has been finalized and submitted to USAID for approval. On April 27,

2016, an official approval and clearance for the above-mentioned Environmental Review Checklist document was received. Finalization of the second round of sub-grant projects related Activity-Specific Environmental Mitigation and Monitoring plans are in progress. Final stipulation of the second round sub-grant projects related Activity-Specific Environmental Mitigation and Monitoring commitments will go in parallel with finalization of sub-grant projects related technical scope and specifications. During the current reporting period, a series of site-visits to the sub-grant project locations were conducted.

F. CROSS-CUTTING ACTIVITIES

i. National Public Communications and Outreach

In the reporting period, EC-LEDS produced a flyer about solar energy and technologies for distribution during the EC-LEDS CBSM pilot campaign in Kutaisi.

EC-LEDS produced the Quarterly Newsletter Spring 2016 for distribution during EC-LEDS events and via e-mail.



Photo 1. EC-LEDS promotional flyer

During this reporting period, the EC-LEDS EE public service announcements (PSA) were aired on the National TV channels Imedi TV and Channel I.



Photo 2. EC-LEDS PSA screenshot



Photo 3. EC-LEDS PSA screenshot

In the reporting period, EC-LEDS held a presentation of the project "Warm Elderly – Energy Efficiency Measures for Tbilisi Elders' Boarding House". The demonstration project presented energy efficient and renewable energy measures with deployment of energy efficient and renewable energy solutions, including, autonomous heating and hot water supply system using natural gas combined with a solar thermal system, the energy efficiency upgrade of the most vulnerable areas of the building envelope and the replacement of incandescent light bulbs with compact fluorescent lamps (CFL). The project was implemented by the Energy Efficiency Center Georgia, with the co-financing from BP Exploration (Caspian Sea) Ltd. within its project "Renewable Energy & Energy Efficiency New Project", Tbilisi City Hall, State Fund for Protection and Assistance of (Statutory) Victims of Human Trafficking, Charity Foundation lavnana and EC-LEDS. The event was highlighted by media.



Photo 4. Guests observing project activities

On June 30, EC-LEDS held two presentations in Kutaisi; (1) launch of EC-LEDS CBSM pilot campaign and (2) presentation of Renewable Energy Project at Kutaisi Torpedo Sport Base.

EC-LEDS supported the Kutaisi Municipality in application of Renewable Energy technology as part of EC-LEDS Community-Based Social Marketing campaign (CBSM). CBSM is a complimentary behavior change approach to EC-LEDS information-intensive outreach campaigns. In contrast to more conventional awareness-building approaches, CBSM is extremely effective at bringing about targeted behavior change in communities and has met with widespread energy efficiency, conservation and environmental communications success.

The project produced a Solar Tree (daisy-shaped), which was installed in the energy efficient public park in the center of Kutaisi. The newly reconstructed park was a result of the Kutaisi City Hall's endeavor to fulfil commitments taken within the Covenant of Mayors, as well as accomplishment of goals prescribed in Sustainable Energy Action Plan.

The presentation of the Solar Tree took place in Kutaisi Public Park on Rustaveli Avenue. Guests from Kutaisi City Hall, USAID/Caucasus, Winrock International, BP-Georgia and Energy Efficiency Center observed the operation of renewable energy technology as a clean and safe energy for a healthy environment.



Photo 5. Presentation of the Solar Tree in Kutaisi Public Park

On the same day, at 12:00 EC-LEDS, BP and Energy Efficiency Center held a presentation of Renewable Energy Project at Kutaisi Torpedo Sport Base. The event demonstrated energy efficiency and renewable energy solutions implemented at the sport base, including procurement and installation of a 2000L capacity solar water heating system, connection of the local grid to PV system, and replacement of existing incandescent light bulbs with 350 compact fluorescent lamps. "Low Emission Development for Sport – Kutaisi Torpedo vs CO₂" was implemented by Energy Efficiency Center Georgia (EEC) with co-financing from BP Exploration (Caspian Sea) Ltd. within its project "Renewable Energy & Energy Efficiency New Project", Kutaisi City Hall, and EC-LEDS. Both events were highlighted by local media.





Photo 6. Guests observing project activities

Photo 7. Project implementers presenting project activities

II. People with Disabilities (PWD), Youth, and Gender

In the reporting period, EC-LEDS held the Youth EE Event in Rustavi. The purpose of the event was to involve youth in energy efficiency, contributing to climate change mitigation.

The students were selected from "Momavlis Taoba" (Future Generation) Civic Educational program partner schools from 9th to 11th grades, in collaboration with the NGO SIQA - Georgian Association of Educational Initiatives. The "Momavlis Taoba" (MT) program, funded by USAID, is being implemented in Georgia by PH International and is supported by the Ministry of Education and Science of Georgia (MES).

During the event, students were given a presentation entitled, "How to Save Energy" followed by a contest, "Energy Efficiency Is a Smart Choice" to demonstrate the EE skills acquired at the seminar. The seminar was conducted by the Dean of Energy and Telecommunications Faculty at Georgian Technical University, Professor. Professor spoke about the importance of energy efficiency, ways of saving energy, energy audits, energy efficiency in the residential sector, energy efficient technologies, simple tips to save energy at home, energy efficient appliances, renewable energies, energy efficient/renewable energy projects implemented under donor support, energy efficiency, and climate change. The winners were awarded medals, and all students were given participation certificates. The event took place in the Rustavi Civic Engagement Center.





Photo 8. EC-LEDS promotional items

Photo 5. EC-LEDS Certificate

III. Cooperation with other USAID programs

EC-LEDS established good communication and cooperation with other USAID sponsored programs, including G4G, Waste Management Technologies in Regions, as well as the EU funded programs - ClimaEast, UNDP, and GIZ.

EC-LEDS continued cooperation with USAID's "Momavlis Taoba" (Future Generation) Program implemented by PH International and supported by the Ministry of Education and Science of Georgia (MES).

I. YEAR THREE WORK PLAN: DELIVERABLES SUBMITTED IN YEAR THREE QUARTER THREE

Component	Deliverable/Product	Date Submitted
M&E	GIS Data Collection Template - Year 3, Quarter 2	25-Apr-16
M&E	Open Data Policy Datasets	6-Apr-16
All	Quarterly Progress Report Jan-Mar 2016	25-Apr-16
Component I	Workshop Report - "Monitoring of implementation of Sustainable Energy Action Plans (Based on Example of Monitoring Report of Tbilisi Sustainable Energy Action Plan (SEAP))	25-Apr-16
Component I	Sustainable Energy Action Plan for Akhaltsikhe (Eng)	25-Apr-16
Environmental Compliance	Environmental Review Checklist for Identifying Potential Environmental Impacts of Project Activities and Processes for Heidelberg Cement Georgia CM3 Research and Renovation in Rustavi	26-Apr-16
Component 3	Updated MARKAL-Georgia BAU Scenario	28-Apr-16
Component 3	An updated version of the "Updated MARKAL-Georgia BAU Scenario"	11-May-16
Component I	Monitoring Report on the Implementation of City of Tbilisi Sustainable Energy Action Plan	18-May-16
Component I	Sustainable Energy Action Plan for Bolnisi (Eng)	31-May-16
Component I	Sustainable Energy Action Plan for Tbilisi (Eng)	31-May-16
Component I	Tbilisi Project Proposal (Eng)	31-May-16
Component I	Project Proposal for Bolnisi (Eng)	31-May-16
Component 3	MARKAL-Georgia Mitigation Measures Report	31-May-16

Component 3	Overview of Each Sector Considered in MARKAL (Energy, Transport, Industry, Building) Developed Including Trend Analysis	31-May-16
Component I	Sustainable Energy and Climate Action Plan of the Municipality of Telavi Community (Geo)	29-Jun-16
Public Outreach	Report on EC-LEDS Youth Energy Efficiency Events Dec 2015_Apr 2016	29-Jun-16

The indicators with year three targets include outcome indicators OC2; OC3; OC4 OC5; OC6; OC7; OC8 and output indicators OP1, OP2, OP4, OP5, OP6, OP7, OP8, OP10, OP11, OP13, OP14, OP15, OP17, OP18, OP22. During quarter three of year three, progress was demonstrated in most of the indicators and some of them even exceeded defined targets. Other activities in all components and cross-cutting issues are being carried out as planned and measurable results will be documented as they are achieved.

During this reporting period, all datasets were submitted for AOR review and intellectual outputs elaborated in Y3Q3 were uploaded on Development Experience Clearinghouse (DEC). In addition, GIS Data Collection Spreadsheet was sent to USAID. INDICATOR TITLE:

Quantity of greenhouse gas (GHG) emissions, measured in metric tons of CO₂ equivalent (CO_{2e)}, reduced or sequestered as a result of USG assistance (OC 2)

	In .a. a.a.										
UNIT:	DISAGGRE	EGATE BY:	None								
Metric tons of	Geogr	raphic Loca	tion	Event				total			
CO ₂											
Results:											
Additional C	Criteria	Baselin									
If other crite	ria are	e	Υ	YI		Y2		Y3		End of Project	
important, add	l lines for		Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved	
setting targe	ets and										
tracking											
Metric tons of CO ₂		0	20,000	0	43,000		55,000		236,000		

INDICATOR	R TITLE: Er	nergy save	ed due to ener	gy efficiency/c	onservatio	n projects	as a resu	t of USG a	ssistance (OC 3)
UNIT:	DISAGGRI	EGATE BY: I	None							
GW/h _e Geog		raphic Locat	ion	Event		Date			total	
Results:										
Additional	Criteria	Baselin								
If other crit	teria are	e)	1)	′ 2	,	Y3	End of	Project
important, add lines for setting targets and			Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved
tracking GW/h _e		0	20,000		42,000		75,000		315,000	

UNIT:	DISAGGRI	EGATE BY: No	ne							
USD	Geographic Location Tbilisi, Georgia)	Event				total		
			EBRD Inve	EBRD Investment in Bust Fleet in Tbilisi		June, 2016	June, 2016 34mlı		n USD	
Results:										
Additional If other crit		Baselin e	Y	(1	Y	′2		Y3	End of	`Project
important, add lines for setting targets and tracking			Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved
USDMillion		-								
		0	0	0	4.0	3.36	3.64	37.36	14	

	R TITLE: No		_	ations positione	d to recei	ve USG fu	nding and	l implemen	t USG pro	ects as a	
UNIT:	DISAGGRE	GATE BY: I	Region or Munici	bality							
USD	Geographic Location		tion	Event			Date		total		
Results:			I								
Addition	al Criteria	Baselin									
If other c	riteria are	e		YI		Y2		Y3		End of Project	
-	add lines for orgets and		Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved	
tracking											
USD Million											
		0	0	0	0		ı		ı		

UNIT:	DISAGGREGATE BY: None										
% of individuals	Geographic Location		ion	n Event			Date		total		
Results:											
Additional Criteria Baselin		Baselin									
If other criteria are		e	ΥI		Y2		Y3		End of Project		
important, add lines for setting targets and tracking			Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved	
		0	0	0			10%		10%		

Unit:	DISAGGREGATE BY: None										
Gigajoules (GJ)	Geog	raphic Loca	tion	Event			Date total				
Results:	Rustavi Rustavi Telavi		Supportir Implemei Heidelbei Renovatio	Low Emission Demonstration Project for Supporting of CoM Signatory Rustavi City in the Implementation of SEAP in Rustavi Heidelberg Cement Georgia CM3 Research and Renovation (Rustavi) Green Recreation Zone in Telavi City			In tota	al, 23, 541.12GJ			
Additional Criteria Baselin											
If other criteria are		е		ΥI		Y2		Y3		End of Project	
important, add lines for setting targets and			Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved	
tracki	•				19 929	19 929	44,583,40 6.65				
		0	0	0	600	600		23,541.12			

UNIT:	DISAGGRE	GATE BY:	None							
Metric tons of CO ₂	Geog	raphic Loca	tion	Event		Date			total	
Results:	Rustavi Rustavi Telavi		Support Implem Heidelb Renova	w Emission Demonstration Project for opporting of CoM Signatory Rustavi City in the plementation of SEAP in Rustavi delberg Cement Georgia CM3 Research and movation (Rustavi) The Recreation Zone in Telavi City			In tota	al, 27216 TCO26	е	
Additional (Criteria	Baselin								
If other crite	ria are	е		ΥI	Y	2		Y 3	End of	Project
important, add	-		Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved
	tracking				1,699,549					

UNIT:	DISAGGRE	EGATE BY: I	Phase of impler	nentation (developed	l, implemente	ed)				
No. of Plans	Geogr	raphic Locat	tion	Event		Date			total	
developed	Bolnisi Telavi			SECAP Telavi Temi			January- 1 March, 2016 April-June, 1 2016			
Results:										
	Additional Criteria Baselin If other criteria are			YI			,	Y3	End of Project	
•			Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved
track	setting targets and tracking No. of Plans developed 0		3	3	4	4	3	2	10	

UNIT:	DISAGGRE	EGATE BY: 1	New offices, ongo	ing offices						
No. of	Geogr	aphic Locat	tion	Event		Date			total	
Sustainable	Akhaltsikhe	t	SEO in Akl	naltsikhet		June, 2016	1			
Energy										
Offices/										
Sustainable										
Energy										
Resource										
Centers										
established										
Results:										
Additional	Criteria	Baselin								
If other crit	eria are	e	Y	(1	Y	′2	,	Y3	End of	Project
	dd lines for Target Achieved		Target	Achieved	Target	Achieved	Target	Achieved		
important, ad			ruiget	Tanger Hemores						

11	DISACCE	CATE DV. A	lono							
UNIT:	DISAGGRE	EGATE BY: N	vone							
Number of	Geogr	raphic Locat	ion	Event		Date			total	
Stakeholders										
Results:										
Additional	Criteria	Baselin								
If other crit	eria are	e		ΥI	Y2		Y3		End of Project	
important, ad	-		Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved
setting targ tracki										
		-								
No. of Stakeho	olders	0	8	12	6	8	2		16	

				strategies, plans					climate cha	ange
UNIT:	DISAGGRE	GATE BY: I	None							
Number of Laws, Policies,		aphic Locat	tion	Event		Date			total	
Strategies										
Results:										
Additional	Criteria	Baselin								
If other crite	eria are	e		YI	Y	' 2)	/ 3	End of	Project
important, add	-		Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved
trackir										
No. of Laws, P	Policies,				1				I adopted	
Strategies		0	I proposed	I proposed	proposed		I adopted		2 proposed	

INDICATOR 1	TITI F: Nu	mher of	climate chan	ge mitigation	tools techno	ologies or	methodol	ngies deve	loned test	ed and/or	
adopted as a				_	toois, teeim	ologics of	memodol	ogies deve	opeu, test	ca ana/or	
UNIT:	DISAGGRE	GATE BY:	None								
Number of	Geogr	raphic Loca	tion	Event		Date			total		
Tools							I				
Results:											
Additional C	Criteria	Baselin									
If other crite	ria are	е		YI	Y	′2	,	Y3	End of	Project	
important, add setting targe			Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved	
tracking											
No. of Tools		0	1	2	2	2	2		5		

INDICATOR TI	TLE: No	umber of	househol	ds/ bus	siness/ public	institution	s impleme	enting en	ergy efficier	ncy measur	res as a result of USG
assistance (OP					·		·		<i>-</i>	·	
UNIT:	DISAGGF	REGATE BY	: None HH,	Busines	sses, Institutions						
No. of electricity consumers implementing	Geog	raphic Loca	ition		Event		Date			tota	il
energy efficiency measures											
Results:											
Additional Cri	iteria	Baselin									
If other criteric	If other criteria are			ΥI		Y	′2		Y3		End of Project
important, add li	nes for		Targe	et	Achieved	Target	Achieved	Target	Achieved	Target	Achieved
setting targets	and										
tracking											
						500		1000		1500	
		0						8		10	
No. of Households	;		0		0	2					
No. of businesses		0									
No. of institutions		0				2		8		10	

INIT:	DISAGGREGATE BY: None			
lo. of climate	Geographic Location	Event	Date	total
nange iitigation	For all municipalities	Kutaisi "Torpedo" —" Installation of Solar Thermal System and Lighting"		
rojects		Tbilisi Elderly house—" Installation of Solar Thermal System and Lighting"		2
		Street Lighting in Batumi		
	Batumi			1
		Public Park in Batumi	June, 2016	1
	Batumi	Street Lighting in Zugdidi		1
	Zugdidi	Low Emission Demonstration Project for Supporting of CoM Signatory		1
		Rustavi City in the Implementation of SEAP in Rustavi	June, 2016	
	Rustavi	Heidelberg Cement Georgia CM3 Research and Renovation (Rustavi)		1
			June, 2016	
	Rustavi	Green Recreation Zone in Telavi City		1
	Telavi			

Results:

Additional Criteria	Baselin e	YI		Υ	′2	,	73	End of Project		
If other criteria are important, add lines for		Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved	
setting targets and tracking										
No. of Projects	0	0	0	5	2	15	8	20		

INIT:	DISAGGRE	GATE BY: No	one									
Number of	Geograph	ic Location		Event			Date			total		
dividuals	Village Misc Georgia		Youth EE Event Pre Energy"	sentation "How to S	Save	Decem	ber 15, 2015	22 female	, 21 male	(43 total)		
			Contest "Energy Eff	•			r-December,	2585 likes	on faceb	ook		
			People reached thro	ough EC-LEDS Facel	oook	2015						
	Mtskheta, Geor	Georgia	Youth EE Event "He	ow to Save Energy -	Contest	March	23, 2016	24 female, 17 male (total 41)				
		_	Energy"- Contest E	fficiency Is A Smart	Choice"			3230 likes	on faceb	ook		
			People reached through EC-LEDS Facebook Youth EE Event "Seminar How To Save Energy Contest Energy Efficiency Is A Smart Choice"				r-March,		•			
	Rustavi, Geor	gia					116	13 female, 21 male (34 total)				
esults:												
Additional	Criteria	Baseline	Y	/ I		Y	2	Y3 (Q1+Q2+Q3)) End of Project		of Project		
If other crit		ria are Target Achieved Target Achie	Achieved	Target	Achieved	Target	Achieved					
important, ad setting targets o	•											
lo. of Individua	ls	0	250,000	254,157	500,00	0	264,047	250,000	254157	l million		

INDICATOR TITLE: Number of USG-supported training or activities that contribute to building the EE knowledge and skills in the GOG, Municipalities, industry and other stakeholders (OP 11)

	DISAGGREGATE BY: I			
Number of	Geographic Location	Event	Date	total
Training activities	Village Misaktsieli	Youth EE Event Presentation "How to Save Energy"	December 15, 2015	1
	Bolnisi	Meeting with local experts and municipality staff on Covenant of Mayors and SEAPs	November 20, 2015	1
	Tbilisi	Preparation of project proposals for the GHGs mitigation measures to be implemented in the sectors considered in SEAPs	November 27, 2015	
	Telavi	Meeting with Deputy Governor and coordinators on Covenant of Mayors and SEAPs	December 2, 2015	1
	<u>Bolnisi</u>	Meeting with local farmers and staff of Bolnisi Municipality	February 19, 2016	1
		Meeting with staff of Telavi Municipality	March 3, 2016	<u>1</u>
	<u>Telavi</u> <u>Tbilisi</u>	Training on SEAP Monitoring	March 31, 2016	<u>1</u>
	<u>Mtskheta</u>	Youth EE Event Presentation "How to Save Energy"	March 23, 2016	<u>1</u>
	Rustavi	Youth EE Event "Seminar How To Save Energy Contest Energy Efficiency Is A Smart Choice"	April 20, 2016	<u>1</u>
	Telavi	The 1st working meeting with the representatives of Telavi Municipality to discuss and agree the mitigation measures for transport and building sectors for TELAVI SECAP document	April 4, 2016	<u>1</u>
	Telavi	The 2st working meeting with the representatives of Telavi Municipality to discuss and agree the mitigation measures for		

INDICATOR TITLE: Number of USG- Municipalities, industry and other st			activities t	that contribute t	o building th	e EE know	ledge an	d skills	in the GOG,
	aste, greening and ocument	street lighti	ing sectors for	TELAVI SECAP	April 22, 2016			1	
<u>Telavi</u>	he final working me Iunicipality to discu Leasures for TELAVI	iss and agre	e technical de		May 23, 2016			1	
<u> </u>	he working meeting pordinator to give of aboration process	eneral infor	mation about		April 12, 2016			1	
Mtskheta <u>d</u>		energy aud		or and local expert to on of other relevant	May 10, 2016			1	
TL:!!:=:	he transport sub-w EDS document	orking grou <u>r</u>	o meeting on t	ransport chapter for	April 8, 2016			<u>1</u>	
Tbilisi <u>Li</u>	he energy sub-work EDS document he industry sub-wo				April 13, 2016			<u>1</u>	
Li Tbilisi	EDS document				April 18, 2016			<u>1</u>	
<u></u>	he building sub-wo EDS document	rking group .	meeting on tro	ansport chapter for	May18, 2016			1	
Results:									
Additional Criteria			Y3 (Q1+Q2-	+Q3))	End of	Project			
If other criteria are important, add lines for setting targets and tracking	Baseline	Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved
No. of Training activities	0 6 10 30				22	14	19	50	

UNIT:	DISAGGREC	SATE BY: Non	e							
Value of grants	Geographic	Location	Event			Date	Total			
distributed	For all munici	palities	Kutaisi "Torped	do" –" Installation of	Solar Thermal Syste	m and Lighting"				
			Tbilisi Elderly h	ouse–" Installation o	of Solar Thermal Syst	em and Lighting"				
			Street Lighting	in Batumi						
	Batumi									
			Public Park in E	Batumi			June, 2016			
	Batumi		Street Lighting	in Zugdidi						
	Zugdidi			Demonstration Project the Implementation		June, 2016				
	Rustavi Rustavi		Heidelberg Cer	nent Georgia CM3 Ro	esearch and Renova					
	Telavi		Green Recreati	on Zone in Telavi Cit	у	June, 2016				
Results:										
Additional Criteria	Baseline		ΥI		Y2		Y3		End of Project	
If other criteria are important, add lines for setting targets and tracking		Target Achieved		Target	Achieved	Target		Achieved	Target	Achieved
Value of grants	0	0	0	300,000	\$175,012	324	4,988	134,447.68	500,000	

one: 87 eme	ency (OP	14)									
UNIT:	DISAGGRE	EGATE BY: I	None								
No. of Plans	Geog	raphic Locat	tion	Event						total	
Results:											
Additiona	Criteria	Baselin									
If other cri	teria are	l lines for Target		YI		Y2			Y3	End of Project	
important, a setting tar	-			Achieved Tarş		Target	Achieved	Target	Achieved	Target	Achieved
•	_				2						
track	ırıg				(Implementation						
					Ongoing)						
No. of Plans											

INDICATOR TI	ΓLE: N u	mber of	benefic	iaries red	ceiving impro	ved infras	tructure so	ervices du	e to USG a	assistance (OP 15)	
UNIT:	DISAGO	GREGATE E	BY: None									
No. of	Geo	graphic Loc	ation		Event		Date			total		
beneficiaries												
receiving												
improved												
infrastructure												
services												
Results:												
Additional Cri	iteria	Baselin										
If other criterio	are	е		ΥI		Y	7 2	,	Y3	End of	Project	
important, add li			To	arget	Achieved	Target	Achieved	Target	Achieved	Target	Achieved	
setting targets and												
tracking												
No. of Beneficiaries		0		0	0	I		2		3		

Jnit:	Disaggrego	ate by: None									
No. of Plans	Geographi	c Location	Event			date	tot	al			
	Bolnisi		MRV Plan o	r Bolnisi		January-March	1, 1				
	Telavi Community			or Telavi Temi		2016 April-June, 201	16				
Results:											
Additiona	l Criteria	Baseline	Y	1		Y2,		Y3	End of	Project	
If other criteria are important, add lines for setting targets and tracking			Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved	
No. of Plans		0	4	4	3	3	3	2	10		

INDICATOR TITLE: Number of individuals at national and local level trained in climate change as a result of USG assistance (OP18) UNIT: DISAGGREGATE BY: None No. of Geographic Location Event Date total Individuals Tbilisi On-job training on elaboration of Markal for Analytical October-5 (2 females, 3 males) Department of Ministry of Energy and Environment December, 2015 November 27. Training on Preparation of project proposals for the 23 (12 females, 11 males) Tbilisi 2015 GHGs mitigation measures to be implemented in the sectors considered in SEAPs Tbilisi 11 (4 females, 7 males) Training on SEAP Monitoring March 31, 2016 Tbilisi 5 (2 females, 3 males) On-job training on Markal-discussion on renewable January-March, model 2016 Telavi April 4, 2016 The 1st working meeting with the representatives of 4 (1 female, 3 males) Telavi Municipality to discuss and agree the mitigation measures for transport and building sectors for TELAVI SECAP document Telavi April 22, 2016 The 2st working meeting with the representatives of 4 (1 female, 3 males) Telavi Municipality to discuss and agree the mitigation measures for waste, greening and street lighting sectors for TELAVI SECAP document The final working meeting with the representatives of May 23, 2016 4 (1 female, 3 males) Telavi Telavi Municipality to discuss and agree technical details, format and measures for TELAVI SECAP document Mtskheta April 12, 2016 The working meeting with the Mayor of Mtskheta and 2 (1 female, 1 male) SEAP coordinator to give general information about the CoM, SEAP elaboration process and technical

Mt	tskheta <u>(</u>	<u>assistance</u>	May 10, 2016	2 (1 female, 1 male)
	T T	The working meeting with the SEAP coordinator and		
Tbi	ilisi	local expert to discuss the details of energy audit and collection of other relevant information for SEAP.	Amril 0, 2016	
		The transport sub-working group meeting on transport	April 8, 2016	15 (5 female, 10 male)
Tbi	ilisi	chapter for LEDS document		11 (5 female, 6 male)
		The energy sub-working group meeting on transport	April 13, 2016	
Tbi	ilisi	<u>chapter for LEDS document</u>		6 (2 female, 4 males)
	T T	The industry sub-working group meeting on transport chapter for LEDS document	April 18, 2016	
Tbi	ilisi	The building sub-working group meeting on transport	May18, 2016	14 (4 females, 9 males)
	<u> </u>	<u>chapter for LEDS document</u>		
			April 20, 2016	34 (13 females, 21 males)
Ru	ıstavi	Youth EE Event "Seminar How To Save Energy	April 20, 2016	
		Contest Energy Efficiency Is A Smart Choice"		

esults:

	Baselin								
Additional Criteria	е	Y)	′ 2	Y	/3	End of Project		
If other criteria are		Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved
important, add lines for setting targets and tracking									
No. of Individuals	0	10	67	40	171	20	140	70	

UNIT:	DISAGGRE	EGATE BY: 1	Vone								
Number of decisions	Geog	raphic Locat	ion	Event		Date		total			
Results: Additional	Criteria	Baselin									
If other cri	teria are	e		YI	Y	/ 2		Y3	End of Project		
important, add lines for setting targets and tracking		-	Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved	

ANNEX I: SCHEDULE OF PLANNED FUTURE EVENTS

A. COMPONENT ONE

Continue technical support in the development of SEAPs and project proposals for the remaining two municipalities

Continue providing capacity building for the Municipality representatives by conducting

- I. Workshops (2)
- 2. On the job trainings (regular)
- 3. Technical tools (final version of muni-EIPMP)

B. COMPONENT TWO

Task Completed

C. COMPONENT THREE

Technical assistance:

- I. Analysis of mitigation options
- 2. Development of MARKAL-Georgia Guidebook
- 3. Development of four LEDS chapters on energy sector, buildings, transport, and industry facilitation of LEDS discussions.
- 4. Facilitation in organizing LEDS steering committee meetings, sub-working groups meetings, and experts groups meetings to discuss LEDS document chapters;
- 5. Training of Analytic Department of the Ministry of Energy for policy analysis by using MARKAL-Georgia

D. PUBLIC OUTREACH

Airing EC-LEDS EE PSAs will continue on National TV channels. EC-LEDS Youth EE Events will take place in April and June 2016 in Rustavi and Kutaisi municipalities.

CBSM pilot will be launched in Kutaisi in the beginning of June, 2016 (date of launch will be confirmed by Kutaisi Municipality in mid-May).

Table 2. Upcoming Events for year three, quarter four

Component	Event	Date/Location
Public Outreach	Information Session for PWD	September, 2016 (location will be confirmed in August, 2016)
Public Outreach	Youth EE Event	September, 2016 (location will be confirmed in August, 2016)
Public Outreach	CBSM Zugdidi Pilot	September, 2016 (launch date will be confirmed in August, 2016)

E. ENVIRONMENTAL COMPLIANCE

EC-LEDS program will continue finalization of second round sub-grant projects related Activity-Specific Environmental Mitigation and Monitoring documentation in accordance with USAID environmental compliance procedures and approved EC-LEDS PEA.

ANNEX II: QUARTER FOUR PLANNED DELIVERABLES AND PRODUCTS

A. COMPONENT ONE

- Mtskheta City SEAP with MRV plan and Project Proposal
- English version of Telavi Municipality SEAP and MRV Plan
- Workshop Reports Establishment of SEO or SEO functions integrated in 4 Municipalities

B. COMPONENT TWO

Task Completed

C. COMPONENT THREE

 Chapters of each sector considered in MARKAL(Energy, Transport, Industry, Building) developed for EC-LEDS Document; MARKAL- Georgia guidebook is English.

D. COMMUNICATIONS AND OUTREACH

As part of the EC-LEDS outreach activities, the program will produce media coverage reports for upcoming events, Report on Youth EE Events and Report on Information Session for PWD where applicable. In the framework of CBSM campaign, EC-LEDS will print flyer on solar energy. The Communication plans for the SEAPs will be prepared. EC-LEDS will produce Report on findings of CBSM pilot in Kutaisi Municipality.

E. MONITORING AND EVALUATION

Intellectual outputs will be uploaded to Development Experience Clearing house.

F. ENVIRONMENTAL COMPLIANCE

Following the scope of 22 CFR 216 Environmental Compliance Procedures and approved Programmatic Environmental Assessment (PEA) document, EC-LEDS will analyze selected sub-grant activities against specific impact factors, including: the character of proposed actions, the type of structural measures, and whether the proposed structural actions, their impacts, and mitigation measures are considered in the PEA defined Environmental Monitoring and Mitigation Plan (EMMPs). Depending on the project -specific individual assessments, either "Activity-Specific EMMP and/or Environmental Review Checklists (ERCs)" documents will be produced. Right after the completion of the project related activities, "Record of Compliance with the EMMP" document will be submitted to USAID.

ANNEX III: REPORT ON EC-LEDS YOUTH ENERGY EFFICIENCY EVENT





ENHANCING CAPACITY FOR LOW EMISSION DEVELOPMENT STRATEGIES (EC-LEDS) CLEAN ENERGY PROGRAM

COOPERATIVE AGREEMENT NO. 114-A-13-00008

REPORT ON EC-LEDS YOUTH ENERGY EFFICIENCY EVENT IN RUSTAVI



April, 2016

This publication was produced for review by the United States Agency for International Development. It was prepared by Winrock International Georgia.

EXECUTIVE SUMMARY

The EC-LEDS Youth Energy Efficiency Event was held in Rustavi on April 20th, 2016. Participants of the events were youth in the 9th-12th grades selected from the "Momavlis Taoba" (Future Generation) Program. The purpose of the event was to involve youth in energy efficiency, contributing to climate change mitigation.

This report presents a description, the list of participants, and an overview of materials used for the event.

YOUTH EE EVENT

PARTICIPANTS

The EC-LEDS Youth Energy Efficiency Event was attended by a total of 34 youth in the 9th to 12th grades from Rustavi and Gardabani schools (13 females, 21 males).

Full lists of participants are provided in **Attachment A**.

CONTENT

The EC-LEDS Youth Energy Efficiency Events were 2.5 hours long, of which the first two hours were dedicated to "How to Save Energy". The seminar covered the following topics:

- What is Energy Efficiency: A brief introduction to energy efficiency and explanation of energy terms.
- Ways to Save Energy: Various ways to save energy and the energy audit.
- Information Campaigns: A brief description of advertising and information campaigns about energy efficiency.
- The Importance of Energy Efficiency: The importance of energy efficiency with regard to the rational use of energy, energy security of the state, and the importance of energy efficiency for Georgia.
- **Energy Efficiency in the Residential Sector**: How to save energy at home.
- **Energy Efficient Technologies**: An introduction to technologies and appliances.
- **Renewable Energies**: Renewable energy sources were discussed with examples of technologies and how to use them.
- **Energy Efficient Projects**: Some energy efficient projects supported by donor organizations.

In the second part of the event the students participated in contests and given simple EE tests covering the topics of the session. The top three winners were awarded with medals. All students and teachers were awarded with participation certificates. The contest questions are provided in **Annex B**.

PRESENTER

The EC-LEDS Youth energy efficiency events were conducted by Dean of Energy and Telecommunications Faculty at Georgian Technical University, Professor Gia Arabidze. The seminar topics and presentation were developed specifically for EC-LEDS Youth Energy Efficiency Event by presenter in cooperation with EC-LEDS staff.

VENUE, TIMING AND LOGISTICS

The EC-LEDS Youth Energy Efficiency Event was held in the Rustavi Civic Engagement Center (22, Kostava street, Rustavi).

The materials were in Georgian and the events were free for all participants.

The event was organized by EC-LEDS in collaboration with of PH International within the framework of the USAID-supported "Momavlis Taoba" (Future Generation) Program.

CONCLUSION

Youth participated actively, with questions and lively discussions. All participants noted the importance of organizing similar events, as such meetings contributed to their awareness of the subjects. They were satisfied with all aspects of the training and confirmed that the presentations met their expectations. After the events, students made commitments to conduct simple home energy audits and spread the word about energy saving among their families and schools.

ATTACHMENT B: CONTEST QUESTIONNAIRE







Contest "Energy Efficiency Is A Smart Choice"

Name, Surname
City
School #
Please select the correct answer:
1. Location of a refrigerator near heating devices affects the efficiency of its operation: a. Positively
b. Negatively
2. A TV set in stand-by mode consumes electricity:
a. Yes
b. No
3. What is the impact of hot dishes placed in the refrigerator?
a. Reduces energy consumption of the appliance
b. Increases energy consumption of the appliance
4. Is it more efficient to read a book by the window to use daylight efficiently?
a. Yes
b. No
5. When using water heater tank (e.g. Thermex) should the regulator be set at the maximum position
a. Yes
b. No
6. In order to maintain warmth in the room generated from fire place or wood stove, is there a need to lower or close the cover in case of their extinguishment?
a. Yes
b. No
7. 80% of consumed energy in a dwelling is consumed by:
a. Heating
b. Cooking
c .Water heating

Enhancing Capacity for Low Emission Development Strategies (EC-LEDS) Clean Energy Program, Report on EC-LEDS Youth Energy Efficiency Event in Rustavi

8. Is it possible to detect a draught's direction with a candle?
a. Yes
b. No
9. Is it necessary to ensure air tightness of doors and windows to reduce energy consumption?
a. Yes
b. No
10. Can packaging tape ensure energy saving if it is fixed on both sides of a cracked window glass?
a. Yes
b. No
11. Is it more efficient to open a window frequently and for a short time to air a storage area?
- · · · · · · · · · · · · · · · · · · ·
a. Yes
b. No
12. When do we spend more energy: while taking a bath or a shower?
a. Bath
b. Shower
13. When cooking, can improperly selected saucepans be a cause for energy loss?
a. Yes b. No
14. When cooking, should a pan fit the size of the burners?
a. Yes
b. No
15. A rounded bottom or wrong size of a pan prolongs cooking time by:
a. 10%
b. 40%
c 120%
16. Can a label fixed on home appliances help us detect the energy efficiency of an appliance?
a. Yes
b. No
17. Can we save energy if we turn the TV set off of stand-by mode?
a. No
b. Yes
18. In order to save energy one should start ironing:
a. From the lowest temperature
b. From the highest temperature
19. Is it possible to get the same light from 25 watt bulb as from 100 watt bulb?
a. Yes
b. No
20. By using modern energy efficient bulbs, we can reduce energy consumption by: a. 15%
u. 15//

b. 60% _____ c. 100% _____

Correct Answers

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
b	a	Ъ	a	Ъ	a	a	a	a	a	a	a	a	a	Ъ	a	a	a	a	Ъ

ATTACHMENT C: AWARDS

Certificate



Medals



Enhancing Capacity for Low Emission Development Strategies (EC-LEDS) Clean Energy Program, Report on EC-LEDS Youth Energy Efficiency Event in Rustavi

Caps, T-shirts, Pens



ANNEX III: MEDIA COVERAGE REPORT





ENHANCING CAPACITY FOR LOW EMISSION DEVELOPMENT STRATEGIES (EC-LEDS) CLEAN ENERGY PROGRAM

COOPERATIVE AGREEMENT NO. 114-A-13-00008

MEDIA COVERAGE REPORT



April - June, 2016

This publication was produced for review by the United States Agency for International Development. It was prepared by Winrock International Georgia

Source: CENN

Date: April 21, 2016

Title: Energy Efficiency Is a Smart Choice

Youth EE Event Continues in Kvemo Kartli

Students from Rustavi and Gardabani took part in the Youth Energy Efficiency Event on April 20th, 2016. The USAID-supported Enhancing Capacity for Low Emission Development Strategies (EC-LEDS) Clean Energy Program empowers youth through training on energy efficiency and renewable energy technologies. The main objective is to involve youth in energy efficiency, contributing to climate change mitigation.

The students were selected from "Momavlis Taoba" (Future Generation) Civic Educational program partner schools from 9th to 11th grades in collaboration with the NGO SIQA - Georgian Association of Educational Initiatives. The "Momavlis Taoba" (MT) program, funded by United States Agency for International Development (USAID), is being implemented in Georgia by PH International and is supported by the Ministry of Education and Science of Georgia (MES).

SIQA is a non-profit legal entity, which is productively functioning in Georgia and abroad since 1999. SIQA oriented on development of critical and creative thinking trough informal learning among society's members (age is unlimited), who's motivated to positive changes, but also contribute to introducing innovative and already approved method of studying, that a person established as an active citizen, who's oriented on self-development.

During the event, students were given a presentation "How to Save Energy" followed by a contest "Energy Efficiency Is A Smart Choice" to demonstrate the EE skills acquired at the seminar. The seminar was conducted by Dean of Energy and Telecommunications Faculty at Georgian Technical University, Professor. Professor will speak about the importance of energy efficiency, ways of saving energy, energy audit, energy efficiency in residential sector, energy efficient technologies, simple tips to save energy at home, energy efficient appliances, renewable energies, energy efficient/renewable energy projects implemented under donor support, energy efficiency and climate change. The winners were awarded medals, and all students were given participation certificates. The event took place in the Rustavi Civic Engagement Center (22, Kostava street) at 14:00.

The EC-LEDS Clean Energy Program is supported by USAID and implemented by Winrock International Georgia. Through this project, USAID supports Georgia's efforts to increase climate change mitigation through energy efficiency and clean energy activities, and enable more responsible management and development of Georgia's natural endowments.

Source: Kutaisi Municipality City Council Facebook Page

Date: June 30, 2016

Title: Solar Daisy in Kutaisi

Chairman of Kutaisi City Council, Deputy Chairmen and Kutaisi Mayor attended the opening ceremony of Energy Efficient Public Park in the central-historical district of the city.

The park is equipped with benches and solar lighting. Among trees and plants, visitors of the park can observe a daisy-shaped "Solar Tree".

The Solar Tree is equipped with various types of charging plugs attached to the stem. The system of the Solar Tree is made up of three main parts: solar panels, charging controller and accumulator. Solar panels convert solar energy into the electric energy, which is supplied to the accumulator through the charging controller, where the energy is accumulated. Presentation of the event was attended by project implementers, as well, among them, representatives of Economic Development Department of Kutaisi City Hall, USAID, Winrock International and Energy Efficiency Center - Georgia.



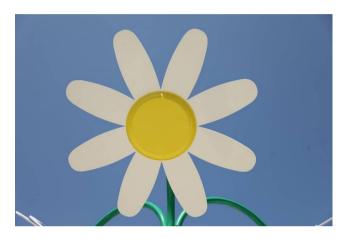


Source: Kutaisi City Hall Press Center

Date: June 30, 2016

Title: Energy Efficient Public Park in Kutaisi

The first "Solar Daisy" is installed in Georgia, in Kutaisi. The idea of the Solar Tree was initiated by Economic Development Service at Kutaisi City Hall. Kutaisi Mayor, Chairman of City Council, representatives of the local self-governance, USAID, Winrock International and NGO Energy Efficiency Center – Georgia observed the renovated Park. The so-called "Solar Daisy" is equipped with USB charging points. The park is equipped with benches and solar lighting. The given technological installation works on solar energy and is used as an autonomous charging point promoting the idea of living in a cleaner environment. After the opening of Kutaisi Touristic Information Center in the park, it will be equipped with free WI-FI and electronic library.





Source: psnews.ge Date: June 30, 2016

Title: Solar Daisy in Kutaisi

The first "Solar Daisy" is installed in Georgia, in Kutaisi. The idea of the Solar Tree was initiated by Economic Development Service at Kutaisi City Hall. Kutaisi Mayor, Chairman of City Council, representatives of the local self-governance, USAID, Winrock International and NGO Energy Efficiency Center – Georgia observed the renovated Park. The so-called "Solar Daisy" is equipped with USB charging points. The park is equipped with benches and solar lighting. The given technological installation works on solar energy and is used as an autonomous charging point promoting the idea of living in a cleaner environment. After the opening of Kutaisi Touristic Information Center in the park, it will be equipped with free WI-FI and electronic library.



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2016/06/30 13:34:47



საქართველოში ,,მზის გვირილა" პირველად ქუთაისში დამონტაჟდა. იდეა ქუთაისის მერიის ეკონომიკური განვითარებისა და ადგილობრივი თვითმმართველობის ქონების მართვის სამსახურის ეკონომიკური განვითარების განყოფილებას ეკუთვნის.

სკვერი ქუთაისის მერმა შოთა მურღულიამ, საკრებულოს თავმჯდომარემ დავით დვალმა , ადგილობრივი თვითმმართველობის წარმომადგენლებმა , USAID-ის , ვინროკ

ინტერნეიშენალის და არასამთავრობო ორგანიზაცია ენერგო ეფექტურობის ცენტრის წარმომადგენლებმა დაათვალიერეს.

ე.წ. "მზის გვირილა"-სთან თავმოყრილია USB დასამუხტი წერტილები , მოსასვენებელი სკამები განათებით, გამწვანება და მზის ენერგიაზე მომუშავე სანათი წერტილები. აღნიშნული ტექნოლოგიური ინსტალაცია, დღისით მასზე განთავსებული მზის ბატარეების მეშვეობით, იღებს საჭირო ენერგიას და გამოიყენება როგორც ავტონომიური დასამუხტი საშუალება, რაც უფრო მეტად ეკოლოგიურად სუფთა გარემოში ცხოვრების წესის დანერგვას შეუწყობს ხელს.

ქუთაისის ტურიზმის საინფორმაციო ცენტრის გახსნის შემდეგ სექტემბრერში აღნიშნულ სკვერში ხელმსაწვდომი იქნება WI-FI, ელ. ბიბლიოთეკა და სხვადასხვა ინფორმაციის მიღება QR კოდების მეშვეობით.

Source: kutaisipost.ge
Date: June 30, 2016

Title: Solar Daisy is Installed in Kutaisi

Energy efficient Solar Daisy is installed on the territory of the former information center. Through fixed solar panels the solar energy is converted into electric power.

The Solar Daisy is capable of charging 60 cell phones and 30 cell phones simultaneously per day.

The Solar Daisy project is implemented by USAID-supported Enhancing Capacity for Low Emission Development Strategies (EC-LEDS) Clean Energy Program, implemented by Winrock International and Kutaisi City Hall.

"The design of a daisy was selected because this flower is symbolic for Kutaisi. There are 24 solar panels fixed on the flower petals that transform solar energy into electric power"- said EC-LEDS Awareness and Outreach Manager.

The presentation of the Solar Daisy was attended by Kutaisi Mayor. According to him, the Solar Daisy will be convenient for Kutaisi inhabitants and tourists as well.

"Soon a tourist information center will be opened and now we have a Solar Tree as well. I suppose, this idea will be successful. Similar projects can be implemented in other parks. This is a creative idea Kutaisi City was in need of." – said Kutaisi Mayor.

According to Mayor, shortly after opening of Kutaisi Touristic Information Center, a free WI-FI and electrical library will be available in the park.

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ქუთაისში მზის ხე დამონტაუდა



13:32 / 30.06.2016



"მზის გვირილას" გამოყენებით შესაძლებელი იქნება დღის განმავლობაში 60, ხოლო ერთდროულად 30 მობილური დაიმუხტოს.

ქუთაისში, ტურიზმის საინფორმაციო ცენტრის ყოფილი შენობის ადგილას ენერგოეფექტური გვირილის ხე

დამონტაუდა. მასზე დამაგრებული პანელების დახმარებით მზის ენერგია ელექტროენერგიად გარდაიქმნება.

"მზის გვირილას" გამოყენებით შესაძლებელი იქნება დღის განმავლობაში 60, ხოლო ერთდროულად 30 მობილური დაიმუხტოს.

ენეგოეფექტური გვირილის ხის პროექტი აშშ-ის საერთაშორისო განვითარების

Source: TV Iberia
Date: July 1, 2016

Title: Solar Daisy in Kutaisi

For the first time in Georgia a Solar Daisy is installed in Kutaisi. According to the City Hall decision, a public park was arranged in the central-historical district of the city equipped with environmentally clean, modern and efficient technologies. The Solar Daisy was installed in this park. The installation converts solar energy into electric power through solar panels. The panels are fixed on the petals of the flower. The Solar Daisy promotes the idea of clean and healthy environment".

"You know that soon a touristic information center will be opened here and it is very important that such technological system is arranged in this park. If this idea succeeds, and I hope it will, we can implement similar project in other parks as well. You have also attended the presentation at Torpedo Football Base today, where the expensive solar photovoltaic system was installed" - said Kutaisi Mayor.



Source: Rioni TV
Date: June 30, 2016

Title: Solar Daisy in Kutaisi

A Solar Daisy is installed in Kutaisi in the framework of Community-Based Social Marketing pilot campaign. 30 points of cell phone chargers are accumulated on the construction, which is equipped with solar elements and modern technologies. In the nearest future, it will be possible to use electric library in the park on Rustaveli Avenue after the opening of touristic information center. Kutaisi City Hall agreed to implement this project following the initiative of Economic Development department. Energy efficient project was implemented within Community-Based Social Marketing pilot campaign implemented by Winrock International Georgia, with the support of USAID.

"The idea of the project was to install a pilot daisy-shaped tree - a construction that is equipped with modern technologies, solar energy transforming devices with charging points in order to charge cell phones and other devices. It will be useful for Kutaisi citizens and tourists as well. We will monitor the work of this new technology"-said Kutaisi Mayor.

"Kutaisi Municipality has joined Covenant of Mayors Initiative (EU) in 2011 that aims at reduction of GHG emissions by 20% for 2020 year. For this aim, it is essential to implement energy efficient and renewable energy projects, along with other projects, as well. This project is a pilot and we will monitor the outcome for the city"-said EC-LEDS Clean Energy Program Chief of Party.

Presentation of a demonstration project took place at Torpedo Football Base. The Project implementers observed works completed under the project. After the presentation, a football match was held. With more details, our correspondent.

"A demonstration project was presented at Torpedo Football Base in the framework of Energy Days. Project donors and implementers observed the energy efficient construction of 200L solar water heating system installed on the territory of Football Base."

"Energy efficient water heating system was installed at Torpedo Football Base, which will significantly reduce consumption of energy on the territory of the base. We plan to implement similar projects in municipal buildings with the support of donors"-said the Head of Economic Development department at Kutaisi City Hall.

"As you already know, BP-Georgia works almost 20 years in Georgia and manages three different pipelines, but more than 13 years our company implements various social and economic projects as well. This project helps Kutaisi and other big cities to join EU initiative-Covenant of Mayors that aims to reduce GHG emissions in the atmosphere by 20% by 2020"- BP-Georgia General Manager.

Project was implemented by Energy Efficiency Center – Georgia with the financial support of BP – Georgia and its oil and gas partners, Kutaisi City Hall, USAID and Winrock International.

"As this Base serves not only professional teams, but amateur and schoolchildren teams as well, all of them will benefit from the project results. Total sum of the project is USD150 000 but each component had the separate cost accordingly"- Director of Energy Efficiency Center Georgia.

"After the presentation, Torpedo football players played a match was conducted between two boys teams, future professional footballers were awarded with certificates".

Source: newpress.ge Date: June 30, 2016

Title: Photovoltaic Lighting System is Installed on Torpedo Football

Base

Various renewable energy and energy efficient systems were installed on Torpedo Football Base. A photovoltaic lighting system was installed and connected to network on Torpedo Football Base. System consists of sixteen 30-watt and ten 60-watt LED lights that were replaced on all lighting polls around the stadium. The peak capacity of the solar electric system is 1560 watt. A 2000-liter capacity solar water heating system was also installed and connected to the existing hot water system working on natural gas.

In the main building, 350 incandescent light bulbs were replaced by compact fluorescent lamps. After the presentation, Torpedo football players played a match. The players were awarded certificates, T-shirts and caps.

Project was implemented by Energy Efficiency Center Georgia, financial support of BP–Georgia and its oil and gas partners, Kutaisi City Hall, USAID and Winrock International Georgia.





ქუთაისში ენერგოეფექტური სკვერი გაიხსნა. სკვერი რუსთაველის გამზირზე მდებარეობს, სადაც ტურიზმის საინფორმაციო ცენტრი ფუნქციონირებდა. ადგილობრივი ხელისუფლების გადაწყვეტილებითა და დონორი ორგანიზაციების მხარდაჭერით ადგილზე "მზის გვირილა" დამონტაჟდა.

ქუთაისის მერიის ეკონომიკური სამსახურის უფროსის, პაატა კლდიაშვილის განცხადებით, ქუთაისის მუნიციპალიტეტის მერიამ ეკონომიკური განვითარებისა და ადგილობრივი თვითმმართველობის ქონების მართვის სამსახურის ეკონომიკური განვითარებისა და ადგილობრივი თვითმმართველობის ქონების მართვის სამსახურის ეკონომიკური განვითარების განყოფილების ინიცირებით მიიღო გადაწყვეტილება ქალაქის ცენტრალურ-ისტორიულ უბანში ენერგოეფექტური ტექნოლოგიებით აღჭურვილი ეკოლოგიურიდ სუფთა სკვერის მოწყობის შესახებ. აღნიშნულ სკვერში პროექტით გათვალისწინებულია მზის ელემენტებით და თანამედროვე ტექნოლოგიებით აღჭურვილი კონსტრუქციის, p.წ. "მზის გვირილის" დამონტაჟება, სადაც თავმოყრილი იქნება USB დასამუხტი წერტილები (მობილური ტელეფონების, ნოუთბუქებისა და სხვა ელექტრო ტექნიკისათვის), მოსახვენებელი სკამები განათებით, გამწვანება (სკვერი შესაძლებელია შემოსაზღვრული იქნეს ერთი მეტრის სიმაღლის ბუჩქოვანი მცენარეებით, ასევე დამუშავდეს და შეივსოს სკვერში არსებული მცენარეული საფარი) და მზის ენერგიაზე მომუშავე სანათი წერტილები. რომელიც დაგეგმილია

"დაბალემისიებიანი განვითარების სტრატეგიების შესაძლებლობათა გაძლიერება (EC-LEDS) სუფთა ენერგიის პროგრამის" მიერ

ადგილზე დამონტაჟებული 30 ტიპის მობილურისა და სმარტფონის დამტენები. ასევე უახლოეს პერიოდში შესაძლებელი იქნება ელექტორნული ბიბლიოთეკით სარგებლობა.